



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

52

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,299	02/17/2004	Patrick Calahan	BEAS-01330US1 SRM/DTX	9743
23910	7590	03/24/2005	EXAMINER	
FLIESLER MEYER, LLP FOUR EMBARCADERO CENTER SUITE 400 SAN FRANCISCO, CA 94111			TO, BAOQUOC N	
			ART UNIT	PAPER NUMBER
			2162	

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

42

## Office Action Summary

Application No.

10/780,299

Applicant(s)

CALAHAN, PATRICK

Examiner

Baoquoc N To

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05/28/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-34 are pending in this application.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sather (Pub. No. 2002/0143815 A1) in view of Beauchamp et al. (US. Patent No. 6,621,505 B1).

Regarding on claims 1, 13, 23 and 33-34, Sather teaches a system to process XML document, comprising:

A streaming parser capable of parsing an XML document and generating a stream of at least one event, wherein each event can represent a portion of the document (the xml document 12 is parsed by a parser 14 to provide a list of semantic elements and attributes to a transformation component 16. The list of semantic elements and attributes are then transformed or mapped to the data structure 20 conforming to the IRA Object Model 18. ...The data elements as represented in XML DOM would include a hierarchical structure with "People" as a top node and first leaf or branch of the element "John" having subnodes "Loves" and "Mary" and a second leaf or branch with the node "Mary") (page 2, paragraph 0021, lines 4-15);

A matching component capable of performing matching on an event in the stream and notifying an observer if the event is a match (matching the ;

Sather does not explicitly teaches notifying an observer if the event is a match; said observer capable of listening for a matching event and passing it to a user object; and said user object capable of handling the matching event. However, Beauchamp teaches "an XML gateway 250 parses the HTTP response to the processor server and feeds the raw XML to an XML solver 252. The XML resolver 252 is responsible for parsing the XML tree to determine how the response should be presented in the user interface. Each screen and screen component is parsed, dynamically created and placed in the appropriate place in the user interface by a presentation manager 254. For each component created and placed under control of the presentation manager 254, a change event listener is registered with a value monitor 256. The value monitor 256 may be a simple hash table with Namevalue pairs representing each value as it is currently presented. When the user updates values on the screen, the value monitor 256 is notified of the changes and updates its associated value in the hash table" (col. 21, lines 15-29). This suggests the concept of notifying the system to update the changes by the monitor. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Sather's system to include the use of observer if an event if matched as taught by Beauchamp in order to allow the user to be aware of the changes that are made.

Regarding on claim 2, Sather teaches the system recited in claim 1, wherein the XML document is represented in a hierarchical structure (the document includes a

Art Unit: 2162

number of elements with parent and child relationships) (page 2, paragraph 0021, lines 9-10).

Regarding on claims 3, 13 and 24, Sather teaches the system according to claim 2, wherein the hierarchical structure can be a tree with each node containing a portion of the document (peoples as a top node and a first leaf or branch of the element "John" having subnodes "Loves" and "Mary" and a second leaf or branch with the node "Mary" (page 2, paragraph 0021, lines 12-15).

Regarding on claims 4, 15 and 25, Sather teaches the system according to claim 3, wherein the streaming parser is capable of performing a method, comprising:

Traversing the XML tree and adding visited nodes into a data structure (the traversals establish a new context for the rest of the pattern) (page 3, paragraph 0030, lines 11-12);

Processing the nodes in the data structure and generating an event for each node (the pattern author matches all items that are objects of an author relation of which the context item is the subject) (page 3, paragraph 0030, lines 12-15); and

Appending the event to the output stream (page 3, paragraph 0030, lines 12-15).

Regarding on claims 5, 16 and 26, Sather teaches the system according to claim 4, wherein the tree can be traversed using a breath-first or depth-first search (traversing upward from the people node (e.g. object) to the root node (e.g., the subject) provides the relationship people) (page 5, paragraph 0041, lines 15-20).

Regarding on claim 6, Sather teaches the system according to claim 4, wherein the data structure can be a queue.

Regarding on claims 7, 17 and 27, Sather teaches the system according to claim 4, wherein the data structure can be processed using a first-in-first-out approach.

Regarding on claims 8, 18 and 29, Sather teaches the system according to claim 1, wherein the matching component is capable of keeping only a portion of the XML document in memory at any given time (page 4, paragraph 0036, lines 8-10).

Regarding on claims 9, 19 and 30, Sather teaches the system according to claim 1, wherein the matching component is capable of knowing the schema of the XML document and foreseeing the coming events (page 4, paragraph 0036, lines 8-10).

Regarding on claims 10, 20 and 28, Sather teaches the system according to claim 1, wherein the matching component is capable of performing an expression-based matched, which can be an Xpath query (xpath expression) (paragraph 0036, lines 20-21).

Regarding on claims 11, 21 and 31, Sather teaches the system according to claim 3, wherein the matching component is capable of keeping, cloning and destroying the entirely or a portion of the sub-tree descending from a node in the tree (generating children node) (page 4, paragraph 0036, lines 8-10).

Regarding on claims 12, 22 and 32, Sather teaches the system according to claim 1, wherein the user object is capable of returning the matching event to an XML stream for use by any other component (page 4, paragraph 0036, lines 8-10).

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is at 571-272-

Art Unit: 2162

4041 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at 571-272-4107.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:


Commissioner of Patents and Trademarks  
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

(703) 872-9306 [Official Communication]

Baoquoc N. To

March 17, 2005

  
JOHN BREENE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100